



# NUTRI*NEWS*

Volume 21, October 2016



# ***TABLE OF CONTENTS***

**04** NJC & SNDA Updates

**06** Healthy Osprey Week

**07** Dept. of Nutrition & Dietetics Update

**08** Medical Organizations Update

**11** Ways to Reduce Food Waste & Feed the Hungry

**14** Cancer: Top Killer of Americans?

**15** Updates from the World of Nutrition

**19** Faculty Spotlight  
Dr. Andrea Arikawa





20

In the Neighborhood

Dr. Lilia M. Loriz

22

Recipes from Jessica's Table

Caffeine Craving Creations

25

Eating in Season

28

MSM & Exercise Recovery

29

All things Pumpkin

35

Leaky Gut Syndrome

38

Glucose Levels: Pregnancy & Diabetes

42

Alcohol & Bariatric Surgery

43

Sugar

# NJC Update

By: Jessica Lindamood

**Hello Ospreys!**

I hope you are all having a wonderful semester! We have some exciting news for you all, but first, a big thank you to all of you who came out on September 7th! T-shirts will be available by the end of the semester and as always, check us out on Facebook (@unfjournalclub) and Instagram (@unf\_njc).

To fill you in on our last Nutrition Journal Club meeting, the food and drug interactions of the drug Warfarin and cranberry juice were explored. The club dove into what Warfarin is, why cranberry juice may interact with it, and how the experiment was set up to test the hypothesis that it is unsafe to consume cranberry juice with Warfarin. It was concluded, in this particular study, that there was no clinically proven interaction between the two.<sup>1</sup> Great job on all of the questions and comments during this discussion!



**Dr. Lauri Wright**

We would like to thank our first guest speaker for this semester who is UNF's very own, Dr. Lauri Wright. Dr. Wright is currently the director of the Doctorate program for Clinical Nutrition at UNF and her journey here has given her a multitude of knowledge and experience. She first attended the Ohio State University where she earned her BS in Nutrition and Dietetics. From there, she attended Case Western Reserve University where she received her MS for Nutrition. Dr. Wright then completed her dietetic internship through Louis Stokes Cleveland VA Medical Center. Her PhD was awarded to her from the University of South Florida, where she was also a professor. There, she conducted research for food insecurity. She also spent 20 years in clinical nutrition in the VA, where she worked in general medicine and specialized in infectious diseases. She began and directed the Bay Pines VA dietetic internship, but she did not stop there. Dr. Wright also directed the UNF dietetic internship and recently started a dietetic internship at USF.

We were pleased we had her with us September 29th. She spoke on the Nutrition Care Process and had provided an article for the student body to read before attending the meeting. More to be released on that in next month's issue! Stay tuned, Ospreys!

Thank you everyone for coming out and we will see you at our next NJC meeting on October 12th, at 11 AM in the Student Ballroom, Sections A & B (3rd floor of the Student Union Building).

#### References

1. Mellen C, Ford M, Rindone J. Effect of high-dose cranberry juice on the pharmacodynamics of warfarin in patients. *British Journal Of Clinical Pharmacology*. July 2010;70(1):139-142. Available from: Academic Search Complete, Ipswich, MA. Accessed September 17, 2016.





# *Student Nutrition and Dietetics Association*

*By: Sara Boyd*

## **Hello fellow Ospreys!**

It has been a great start to the semester and the SNDA officers are beyond excited to be apart of your fall semester!! We have had a few hiccups during the year so far as we are just learning how to manage the leadership positions as well as bring all nutrition students together! We appreciate all your patience and promise we will become more consistent as the year goes on!

## **Updates for the month of October:**

- FNCE is only a few weeks away and students are gearing up for the trip to learn and meet new people that will benefit their career for years to come. Look for updates in the November issue of all the awesome things they get to experience!
- Mentor/Mentee gathering: We realize that unfortunate events happened during the Chipotle fundraiser in September. But, that's okay! We are planning to have our mentor/mentee gathering during our Halloween party on the 27th of October! We will also be holding a Halloween treat contest! Create your favorite Halloween dish with a healthy twist and enter to win a prize!

The most creative and festive, the better! Keep up with our Facebook page for updates on that in weeks to come!

- **TALON CONTEST!** We really need your help with creating a Student Nutrition and Dietetics Association talon to be placed in front of the Brooks College of Health!

- T-shirts are on sale for \$15!! This is one of our most popular fundraisers as it helps us provide more functions for you throughout the year! Support the SNDA by purchasing one today!

Contact Caitlyn Phelps, Dwayne Swinton, or Sara Boyd for more details

# Breathe Easier...

Because the University of North Florida was ranked in the top 26 healthiest schools in the nation!

Chartwells, the university's food service provider on campus, has helped accomplish this goal by providing a website offering locations around campus based on a student's dietary needs by using an icon labeling system. This is extremely beneficial to multiple people and easily accessible for everyone to use!





*Updates from*

# The Department of Nutrition and Dietetics

*By: Jenn Wihlborg*

Recently, there have been a number of faculty accomplishments within the Department of Nutrition and Dietetics. As students of these wonderful faculties, let's all congratulate our professors, and take a moment to be thankful for the wonderful RD's that we get to learn from! Next, let's congratulate a fellow classmate on her own accomplishment. Lastly, there are some updates from our wonderful clubs and some great resume building opportunities within them.

## Faculty Accomplishments

- **Cathy Christie**, Associate Dean and Professor, received the Transformational Learning Opportunities Impact Award for her Italy study abroad work. She also received the Florida Academy of Nutrition and Dietetics Medallion Award for her dedication to the high standards of the dietetics profession.
- **Lauri Wright** received the FL Academy of Nutrition & Dietetics Leadership in Grassroots Public Policy award.
- **Dr. Rodriguez** is on an International Committee to discuss the future of the profession.

## Student Spotlight

- **Janice Anglin** received the Florida Academy of Nutrition and Dietetics Outstanding Dietetics Student Award.

## Volunteer Opportunities Within Our Clubs

- **The Bridge of Northeast Florida** is always looking for helping hands! This is a wonderful organization that helps out inner-city kids and teaches garden and nutrition education right in the heart of downtown Jacksonville. Volunteers are needed on Tuesdays and Thursdays from 4-5 pm. Contact Natalie Lowe for more info (natalielowe2013@gmail.com)
- **Market Days** always need volunteers to help out with tabling. This is a great way to share our knowledge with fellow Ospreys! Contact Natalie Lowe for more info (natalielowe2013@gmail.com)





# Updates

from Organizations you know

By: Michelle Wolff

The Obesity Society is a scientific and educational organization that focuses on expanding the research, prevention, and treatment of obesity to assist those with obesity. The members of the society are made up of PhDs, MDs, and RDs who work in various settings including universities,



*Research. Education. Action.*

hospital, individual or group practice, medical school, and other fields. These members receive continuing education from TOS which they can apply to their work. TOS publishes a weekly newsletter called TOS eNEWS. This letter is distributed every Wednesday to around 16,000 researchers and clinicians who have an interest

in obesity science. The Society also currently publishes two journals, including the leading peer-reviewed scientific journal in the field, *Obesity*, and a new journal, *Obesity Science & Practice*.

One of this month's major interests is *ObesityWeek* which is fast approaching. *ObesityWeek* is the society's annual meeting which is held from October 31st-November 4th, 2016 in New Orleans. This meeting is cohosted with the American Society for Metabolic and Bariatric Surgery which together bring in numerous experts in obesity research, treatment, and prevention. During the meeting, the most recent discoveries from laboratory studies are broken down to the basic science and presented so it can be used to treat patients. Members have access to several lectures, panel discussions, oral presentations, as well as interactive debates. Last year more than 1000 research abstracts were presented in oral presentations. It is here that members benefit the most from learning about the newest discoveries and technologies.

Founded in 1917, the Academy of Nutrition and Dietetics was originally made with the intent to help the government conserve food and improve the public's health and nutrition during World War I. Now, the Academy is the world's largest organization of food and nutrition professionals including registered dietitians, dietetic technicians, and other



dietetics professionals. Their goal is to improve the nation's health while also making progressions in the profession of dietetics. The members of the academy do their best to have a positive impact on the

public's food choices by improving nutritional status and treating illnesses or injuries. Recently the Academy announced the theme for *National Nutrition Month 2017*, which takes place in March. A crack on "Put Your Best Foot Forward", the theme is "Put Your Best Fork Forward" implying that each of us holds the tool to help us make healthier food choices. ►



During March academy members will help to influence the public on shifting to healthier choices by promoting various NNM activities and messages.

The academy continually posts articles on their website of new findings and informative nutrition news that is very beneficial to the public. One of their articles from this month is “7 Cancer Prevention Tips for Your Diet” where they outline the general national guidelines to reduce the risk of cancer while also making suggestions on how to follow them. This article comes at a good time since next month is *National Breast Cancer Awareness Month*. Another article from this month is, “Quick Guide to Food Safety While Traveling the U.S.” which gives tips on how to choose the healthiest and safest food choices while traveling whether you’re on a plane, a boat, or at your destination. This is extremely beneficial for those who are looking to traveling during the upcoming holidays.



The American Society for Nutrition started out as the American Institute for Nutrition when it was founded in 1928, and became the ASN in 2005 when the American Society for Clinical Nutrition, the American Society for Nutritional Science, and the Society for International Nutrition merged. It is dedicated to bringing together the world's top researchers and clinical nutritionists to further expand the public's knowledge of nutrition and to improve human health. Today it is comprised of more than 5000 scientists and practitioners and is continuing to



American Society for Nutrition  
*Excellence in Nutrition Research and Practice*

grow. The members of ASN work towards developing and extending the knowledge of nutrition through various types of research and provide reliable nutrition information for those in need. This is accomplished thorough improving research in animals and human nutrition, sharing results of peer-reviews nutrition research, and encouraging education and training in nutrition. The ASN currently publishes three academic journals: *The American Journal of Clinical Nutrition*, *The Journal of Nutrition*, and its newest journal, *Advances in Nutrition*.

Preparations have already begun for the “*Advances and Controversies in Clinical Nutrition Conference*” which will take place on December 8th-10th 2016. This meeting is held by the ASN and 2016 will mark the 6th year of the event. During the three day conference, the latest research, advances, and best practices in clinical nutrition will be exhibited. The conference delivers this information through lectures, controversy sessions, workshops, professional development, scientific posters, and more. The target audience for this conference consists primarily of health care professionals and is geared towards developing an interest in clinical nutrition and to communicate new cutting edge advances in nutrition research. Some of this year's program highlights include: *Treatment of Metabolically Normal Obesity*, *Dietary Approaches for Diseases Associated with Insulin Resistance*, and *New Approachs.es for Prevention of Peanut Allergy*.

References : 1. <http://www.obesity.org/home> 2. <http://www.eatright.org/>

3. <https://www.nutrition.org/> 4. <https://www.eventscribe.com/2016/ACCN/>



Second online doctoral program in U.S. | Full- and part-time options available

# Earn your Doctorate in Clinical Nutrition at the University of North Florida.

The online Doctorate in Clinical Nutrition is an advanced-practice doctoral program with emphasis on evidence-based practice and chronic disease prevention and treatment in under-served populations in both clinical and community settings. The DCN will prepare practitioners for leadership roles in clinical, community or higher education settings through course work, advanced practice residency and applied outcomes-based research.



UNF is ranked in the Top 75 in the country for "Best Online Graduate Education Programs," which includes data of nearly 1,000 distance education programs nationwide.





# Willful Waste, Woeful Want: Ways to Reduce Food Waste & Feed The Hungry

By: Kea Schwarz

There has been an increase in food production in the past half-century that has decreased the proportion of hungry people in the world, even though the population size has doubled. In spite of that, more than one in seven people still do not have access to adequate protein and energy from their diet, and an even greater population of people suffers from some form of micronutrient malnourishment.[1] This is an unfortunate situation, but there is a surprisingly simple strategy that could increase the world food supply, while simultaneously cutting greenhouse emissions and saving money. This is possible through reducing food waste.

In America there is an estimated 70 billion pounds of food wasted every year.[2] Farmers produce more food than we need in America. Those who have easier access to foods, generally are the ones who are more wasteful for various reasons. Farmers play their part by putting in a lot of time to make sure crop yields are at their peak each season. They do their best to reduce the loss between field and fork, but it is up to us as consumers to make conscientious decisions while shopping to reduce the food waste inside our homes.[3] We all need to work together to help those who feel the effects of food insecurity. There's a lot we can do as individuals in our own homes to reduce food waste and feed the hungry. ►

## Shop Smart

Prior to going to grocery store make a meal plan for the week or make a store slip. Buy only what you need. It's also important to be mindful when looking to purchase bulk items as produce, because of the limited shelf life. This way you will save money as well as food that may potentially be thrown away prior to consumption. Also, don't be afraid to purchase "imperfect" fruits and vegetables. Grocery stores reject 20% of the nation's produce just because it doesn't meet aesthetic standards. [4] At the same time, avoid fruits and vegetables that are heavily bruised.



## FIFA

Everyone has a few canned goods hiding in the back of their cabinets or spinach that was purchased three weeks ago in the bottom of the fridge drawer. Sometimes food goes bad because of improper storage or poor visibility. It's a good idea to organize your food to help you become familiar with what is available in your pantry, and ensure you use what you have. A great method of organization is the first in first out system. This is a food rotation system that can greatly reduce spoilage of foods in the pantry and fridge. Eating foods in order of expiration date can greatly reduce the amount of food waste in our homes.[5]



## Smaller Portions

Another tip is to consume smaller portions. When eating in a cafeteria ask for a smaller sample. You can always go back for more. Also, try to only make what you think you and your family will consume at home. If you end up with leftover food on your plate, keep the left overs and make sure you actually eat them. Many times we'll put left overs in the fridge and never get around to eating them, thus they end up in the trash. Another idea would be to do something creative with your left overs. Plan meals using ingredients that are closest to their expiration date. [6]

## Donate Composite

There are many ways to compost. This can be done by freezing food scraps and taking them to local farmers markets that collect the scraps for their compost. Another option is composting at home. There are many sources on the internet that can show you how to compost to enhance the growth of the plants in your yard or for your home garden. [7] The EPA website has many links to aid in beginner composting, as well as lists the many benefits that composting has on food waste reduction. A major point is reduction of methane gas, which is a potent greenhouse gas, in landfills that substantially contributes to climate change.

Lastly, donating unwanted food can be a great way to reach out to your community. Collect unspoiled, healthy foods and seek out the local food bank or homeless shelter to support the needy in your area.

### References:

1. Godfray C, Beddington J, Crute I, et al. Food security: The challenge of feeding 9 Billion people. Science AAAS. 2010;327(5967):812-818. doi:10.1126/science.1185383. <http://science.sciencemag.org/content/327/5967/812.full>. Accessed September 12, 2016
2. FeedingAmerica. Food waste in America. FeedingAmerica. <http://www.feedingamerica.org/about-us/how-we-work/securing-meals/reducing-food-waste.html?referrer=https://www.google.com/>. Accessed September 12, 2016.
3. Newgent J. Produce from purchase to plate - steps to reduce food waste. Eat Right. <http://www.eatright.org/resource/homefoodsafety/safety-tips/food/produce-from-purchase-to-plate-steps-to-reduce-food-waste>. Accessed September 12, 2016.
4. Gunders D. Wasted: How America Is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill. Publisher unknown. August 2012;1-22. <https://www.nrdc.org/sites/default/files/wasted-food-IP.pdf>. Accessed September 12, 2016
5. Newgent J. Produce from purchase to plate - steps to reduce food waste. Eat Right. <http://www.eatright.org/resource/homefoodsafety/safety-tips/food/produce-from-purchase-to-plate-steps-to-reduce-food-waste>. Accessed September 12, 2016.
6. Howard J. Practical tips for making less food waste and feeding hungry people. Food Management. [http://foodmanagement.com/healthcare/practical-tips-making-less-food-waste-and-feeding-hungry-people?NL=FM-01&Issue=FM-01\\_20160819\\_FM-01\\_553&sfvc4enews=42&cl=article\\_2&utm\\_rid=CPG06000000008660&utm\\_campaign=11356&utm\\_medium=email&elq2=abfd12e69ec4b6498aa009bf011e2c1](http://foodmanagement.com/healthcare/practical-tips-making-less-food-waste-and-feeding-hungry-people?NL=FM-01&Issue=FM-01_20160819_FM-01_553&sfvc4enews=42&cl=article_2&utm_rid=CPG06000000008660&utm_campaign=11356&utm_medium=email&elq2=abfd12e69ec4b6498aa009bf011e2c1). Accessed September 12, 2016.
7. Newgent J. Produce from purchase to plate - steps to reduce food waste. Eat Right. <http://www.eatright.org/resource/homefoodsafety/safety-tips/food/produce-from-purchase-to-plate-steps-to-reduce-food-waste>. Accessed September 12, 2016.
8. U.S EPA. Reduce wasted food by feeding hungry people. EPA US Environmental Protection Agency. <https://www.epa.gov/sustainable-management-food/reduce-wasted-food-feeding-hungry-people>. Accessed September 12, 2016.



# *Is cancer on its way to becoming the top **KILLER** of Americans?*

Up until the early 1990s, Heart disease was the leading cause of death in the United States. However, since the year 2000, cancer has become seemingly more problematic. Currently, it rests as the number one cause of death in twenty-two (nearly half!) of the U.S.'s fifty states.

The decrease in heart disease-related deaths is a direct result of the development of new technologies; although that does not mean heart disease has completely faded into the background. The drop in heart-related deaths is also a result of improved treatment practices. Many people still have the disease, but now with improved medications, can live with it. The caveat to this is that while modern medicine has given us the ability to live longer lives, it has also increased our risk for cancer. Cancer emanates with aging, so now that people are living longer, it is inevitable that more people will acquire the disease. Interestingly enough, the population that lives in the states with cancer as their No. 1 cause of death seems to be healthier overall. This is likely because they have outlived other causes of mortality, and therefore presumably get cancer as a result of aging.

Furthermore, cancer is starting to be seen as the number one killer among certain minority groups. According to the CDC, from 2000-2014, the number of cancer deaths in the non-Hispanic API population increased by 79%, and replaced heart disease as the leading cause of death in 2000. A family trend is seen within the Hispanic population where cancer deaths increased by 72% in 2000-2014 and became the number one leader of death in 2009.

One main issue with reducing cancer is that it is a multifaceted disease, comprising itself of several diseases. This makes it considerably harder to do research and develop prevention and treatment techniques. On the other hand, heart disease is a far narrower branch of medicine and scientists have already been able to develop a bevy of effective treatments.

Despite the decrease in heart-related deaths, the disease, much like cancer, remains prevalent. Many of the risk factors for heart disease assimilate with cancer such as smoking and poor diet. Obesity also poses as a major risk for both diseases. The only way to really see a decrease in both cancer and heart-borne illnesses would be for people to reduce their risk by eating healthier, exercising, and avoiding smoking. With modern science still struggling to catch up to the overwhelmingly negative impacts of these diseases, self-preventative treatment is at the very least a viable start.

## References:

1. <http://www.latimes.com/science/sciencenow/la-sci-sn-cancer-top-killer-20160823-snap-story.html>
2. [https://www.cdc.gov/men/lcod/2010/lcodrace\\_ethnicity-men2010.pdf](https://www.cdc.gov/men/lcod/2010/lcodrace_ethnicity-men2010.pdf)
3. <https://www.cdc.gov/nchs/products/databriefs/db254.htm>
4. <https://consumer.healthday.com/cancer-information-5/mis-cancer-news-102/cancer-on-course-to-become-top-killer-of-americans-714169.html>
5. <http://news.heart.org/cdc-u-s-deaths-from-heart-disease-cancer-on-the-rise/>



# Nutrition Updates

Find out what's currently trending on supermarket shelves, social media, and within the world of nutrition and dietetics.

By: Jessica Glosson, BS

## Apple Cider Vinegar

Apple cider vinegar (aka ACV) is a fermented vinegar product derived from apples. ACV has been used throughout history to serve a multitude of purposes: it flavors salad dressings, works as an all-purpose cleaner, alleviates hiccups and sore throats, and can even be used to whiten teeth! A plethora of research has recently focused on the potential health benefits of ACV in cases of chronic conditions such as diabetes, cancer, and obesity. [1] These studies have procured interesting results; ACV consumption is thought to potentially improve satiety in those struggling with weight loss and when drank with water prior to meals, ACV use has been correlated with lowered fasting blood glucose levels in individuals at risk for Type 2 Diabetes Mellitus. Evidence on these claims is limited however, and more research is needed within this area. [1]

In grocery stores, apple cider vinegar is quickly appearing in more and more products across the aisles. You can find it in the ingredient lists of facial toners, marinades, and grain-based salads. Switchel, a beverage that dates back to colonial American times, is comprised of apple cider vinegar, ginger, honey, and maple syrup; the resulting tangy drink has recently been cropping up in the refrigerated sections of grocery stores nationwide. Switchel is comparable to the also popular kombucha drink in terms of taste and price (a bottle retails for around \$3.29).





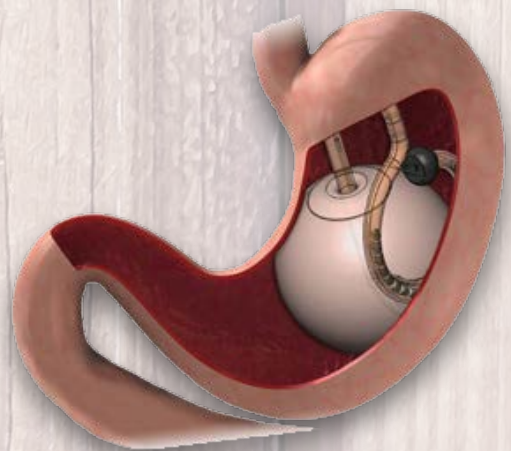
## Pulse-based Pasta

In concordance with increasing trends towards gluten-free, organic, and/or vegan dietary patterns, pulse-based pasta products are rapidly gaining popularity among consumers and retail chains alike. The term “pulses” refers to leguminous foods such as beans, lentils, chickpeas, and dried peas. Pulses are a nutritional “win” because they serve as low fat, plant based protein sources that contain beneficial fiber and vitamins. Gluten has acquired a pretty bad rap recently and pulse-based pastas have certainly capitalized on this. Pulse pastas are gluten free, generally vegan in nature, and can be cooked and served just like traditional pasta. Examples include red or green lentil penne, soy bean spaghetti, chickpea fusilli, edamame fettuccine, and even black bean spaghetti.



## Intragastric Balloon Weight loss Procedure

Also referred to as a “balloon enteroscopy” or “gastric balloon”, the intragastric balloon relates to a new type of weight loss procedure that does not involve an invasive surgery and can actually be performed in an outpatient setting.[2] This procedure was recently approved for use in the US by the FDA in July 2015.<sup>3</sup> A deflated silicone balloon is inserted endoscopically into the stomach and is then filled with saline to inflate. The presence of the inflated balloon increases feelings of satiety and limits the amount of food a person is able to consume.[2] An inserted balloon is only intended to last for six months and its placement still requires an individual to adopt healthy lifestyle practices such as portion control and exercise. Most patients experience nausea and vomiting after placement; more serious complications are rare but could include stomach perforation or digestive blockage if the balloon were to deflate unintentionally.[2]





## Grocery/Meal Delivery

Online shopping has been taken to a whole new level. New apps and websites like Shipt, Instacart, and Safeway allow customers to order groceries online and have them shipped to their houses for an effortless retail experience. These sites generally require users to

sign up for a site-specific membership and in doing so, consumers can enjoy perks such as unlimited free grocery deliveries on orders that exceed a specified dollar amount. Companies like Blue Apron, HelloFresh, and Plated offer weekly delivery services that provide clients with recipes and a complete set of meal ingredients with which to prepare them with. These services are ideal for single working professionals who have an aversion to the grocery store but the desire to prepare whole-food meals.



## "Clean" Eating: Labels, Marketing, and Foods

"Clean eating" refers to a recent trend that involves the embrace of minimally processed and natural food products.[4] A decreased sense of trust towards the food industry and processing methods has resulted in the push for more organic, locally sourced fruit, vegetable, and grain products.[4] Consumers are speaking and food companies are certainly listening. In response to this trend, Panera Bread launched a series of ad campaigns in 2015 that publicized their support of "clean foods". This marketing tactic continues today, seen in the company's recent removal of several artificial flavors and preservatives from a number of food products.<sup>5</sup> The clean eating influence has impacted the composition and labeling of food products as well. Companies like "RXBAR" and "The Perfect Bar", for example, capitalize on their products' limited list of ingredients and even incorporate this element of the product into their packaging.



### References:

1. Zeratsky K. Drinking apple cider vinegar for weight loss seems far-fetched. Does it work? The Mayo Clinic Web site. <http://www.mayoclinic.org/healthy-lifestyle/weight-loss/expert-answers/apple-cider-vinegar-for-weight-loss/faq-20058394>. Published March 17, 2015. Accessed September 14, 2016.
2. Mayo Clinic Staff. Intra-gastric Balloon. The Mayo Clinic Web site. <http://www.mayoclinic.org/tests-procedures/intra-gastric-balloon/basics/risks/prc-20146867>. Updated November 5, 2015. Accessed September 14, 2016.
3. FDA News Release. FDA approves non-surgical temporary balloon device to treat obesity. U.S. Food and Drug Administration Web site. <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm456296.htm>. July 28, 2015. Accessed September 14, 2016.
4. Thalheimer JC. Hottest Nutrition Trends of 2016: Clean Eating. Today's Dietitian. June 2016; 18(6): 37. <http://www.todaysdietitian.com/newarchives/0616p37.shtml>. Accessed September 14, 2016.
5. Kell J. Panera Bread Makes Another 'Clean' Food Promise. Fortune. Published June 15, 2016. Accessed September 14, 2016. Available at <http://fortune.com/2016/06/15/panera-clean-food-promise/>.



100% online | 12 months full time, 16-24 months part time

# Earn your Master of Science in Nutrition and Dietetics online.

The MS in Nutrition thesis and non-thesis option is a distance-learning degree for those students who wish to emphasize the application of advanced nutrition knowledge in clinical or community based health programs. Applicants for the MS Thesis or Non-Thesis option in Nutrition are persons with a baccalaureate degree from a U.S. regionally accredited institution and ACEND/CADE accredited program with a major course of study in Food and Nutrition, Human Nutrition, or Food Management or Registered Dietitians.



UNF is ranked in the Top 75 in the country for "Best Online Graduate Education Programs," which includes data of nearly 1,000 distance education programs nationwide.



# Faculty Spotlight

## Andrea Arikawa

*By: Thomas Myslinski*

Dr. Arikawa is a Professor in the Nutrition field. She received her MPH in Nutrition from University of Sao Paulo, her PhD in Nutrition with a minor in Biostatistics from Minnesota and became a Registered Dietitian from Iowa. Right away we started talking about some research that she was very interested in starting and hopefully getting approved for it.



**Q) What exactly is your research question for the research you want to conduct?**

A) "First we just want to know the prevalence of dietary supplement use is." She went on to say that they will get a broad spectrum of take people that obviously go to the gym and take a lot of supplements, some supplements and people that don't take any supplements. In order to get this broad spectrum hopefully around 200 people will be a good amount. She also said that, that is the first research question. The second question that spawns from the first question is, "To see if there is an relation between taking supplements and levels of certain biological markers of inflammation and oxidative stress." She also went on to say that there are many questions we can look at from that and the first question also. One of these questions could be, "Do people that take supplements have a healthier diet as opposed to people that don't." After she brought that up I added that through my experience, I have realized that the people who understand what the supplements actually do for you are the ones who use them to supplement their strict diets. It is easy to see which do this because they look more "ahead" of the competition. She actually said that I touched on the third objective of the study, which is, "To form focus groups and see actually how much they know about these supplements and where they get their information about them."

**Q) I asked her why most of her publications and research was based around exercise or sports nutrition and why that was.**

A) She said that she started this entire work post doc,

she said that it was just starting, they needed a post-doc and it was related to women and prevention of breast cancer which was her area, prevention of cancer. She said, "It just fell into my lap." She found it very interesting because most of it was exercise related instead of diet related. She actually stats, "A very little portion was diet related." After she completed this study she realized, "How important the effects of exercise could be in prevention of disease." It was then she realized that, "You can not have a study with diet without the exercise component." It is just like looking at a scale. On one side you have the diet and on the other side you have the exercise. If both are in order there is balance but when one if off it will mess up the system and through off the equilibrium.

**Q) What is the fastest growing problem in the Nutrition community?**

A) "What I see from going to meetings this year is that we are going through a period of transition where some of the old beliefs and paradigms are changing." We are putting more emphasis decreasing sugar intakes, or carbohydrates, and increasing more whole foods. From this topic we started talking about insulin spike after a high carbohydrate meal and she went on to say, "That even though is after the big peak in insulin, on the way back after the spike it can lower your blood level with nutrients." It made perfect sense, I get the feeling of hunger no more than an hour after I have had my post workout meal and it is because of that reason. She replied with that saying, "So maybe with less of a peak you don't get that strong hunger feeling as quickly."



# In the Neighborhood

## Lillia M. Loriz

*By: Thomas Myslinski*

Dr. Lillia M. Loriz is the director of the school of nursing, a professor, and also maintains part-time practice at the Student Health Services. Her expertise is in Geriatric Nurse Practitioner, HIV, and Chronic Illness. She received her MSN in Geriatric Nurse Practitioner from Marymount University and her PhD in Nursing Administration from George Mason University. I was given the opportunity to interview her and talk with her a little bit on some topics.

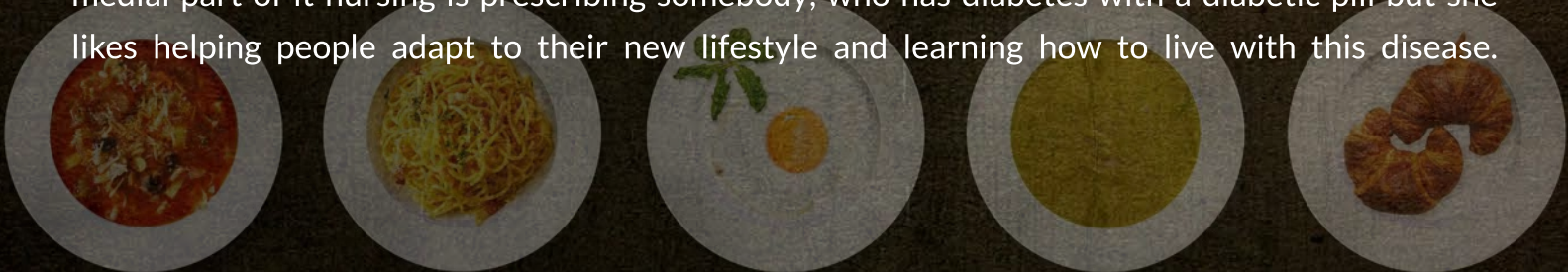


**Q) Online it said that a big hobby of yours is cave diving, where do you like to cave dive and what is your favorite place to go cave diving?**

A) She likes to dive here in Florida in the aquifers. Dr. Loriz and her husband initially got into cave diving after both of them already were divers and they heard about cave diving wanting to give it a shot. Her husband is now a cave diving instructor. Her favorite place to dive is in Mexico because, "...just the caves have a lot of formations and most of them look like snow."

**Q) What made you get into nursing?**

A) "As a child I always wanted to help people." She had a huge interest in medicine but early on she came to the realization that nursing was a lot different than medicine in the sense that you deal with the individual more than the disease. As she moved further along in her field she learned that her job is to help people live with the diseases instead of fixing the chronic diseases. The medial part of it nursing is prescribing somebody, who has diabetes with a diabetic pill but she likes helping people adapt to their new lifestyle and learning how to live with this disease.





**Q) Since her job has kept her very busy she has hopes of one day doing research what motivates people to cave dive or hikes.**

A) She said it has nothing to do with nursing but all about her interests. Since there are a lot of injury that happens while doing these activities she was wondering what exactly causes these injury's and what could be done to prevent some of them.

**Q) What would you say is the most common way nutrition arises in your field and what is the most common nutrition related problem?**

A) "I think that nutrition and nursing are very interrelated." She went on to say that nurses have a good understanding of basic nutrition and what it means to make good decisions while eating and living a healthy lifestyle but when it comes to micronutrients and stuff like that she said that is when a dietician would come into play and take over. Diabetes is the sequel of Obesity, she said. She went on to talk about how much it has changed in the sense that when she was starting her nursing career that she never saw kids with Type 2 Diabetes and now it is common to see that. There are a lot of things that lead to this, video games, more advanced technology, and "big macs" and a lot more fast food.

**Q) What micronutrients do you find your patients are most deficient in?**

A) Her answer was very simple, Vitamin D and B-12 Vitamins. She went on to say that the most common thought about Vitamin D right now is that because of more people wearing sunblock now more than ever this means we are blocking the Vitamin D from the sun. Also, the B-12 Vitamins could be a big reason behind some of the new degenerative disorders lately (multiple sclerosis, ALS)





# Caffeine Craving Creations

By: Jessica Glosson

Starbucks is great and all but those \$5.35 skinny vanilla lattes add up quickly, not just in cost but in calories as well. While I'll be the first to admit that my Starbucks Gold level reward card is one of my most cherished possessions, I've found that a certain satisfaction comes with making your own caffeinated beverages at home. It's great to be able to have total control over the ingredients within your drink and saving money in the process is always an added bonus. This month's recipe spread features some fall-flavored inspired coffee, tea, and protein shake recipes made with dairy and sugar alternatives. Each recipe can be easily modified to include your dairy or non-dairy product of preference. Since we do live in Florida and the weather this time of year does not always warrant a hot drink, try the latte or cider recipes over ice! As always, enjoy and be well. :)

## Coconut Water Iced Coffee

### Ingredients:

- 1 cup coconut water (Zico, Vita Coco, Bai, etc.)
- ½ cup coffee concentrate (cold brew coffee or espresso with added water works as well)
- Optional: Soy/ almond milk creamer or coconut creme for stirring

### Directions:

- Add coconut water and coffee concentrate together in a glass with ice.
- Add creamer if desired and stir to combine.





# Salted Caramel Mocha Protein Shake

## Ingredients:

- ½ cup brewed coffee, cooled
- ¼ cup unsweetened vanilla almond milk (or other milk alternative of your choice)
- ¼ cup low-fat cottage cheese
- 1 scoop chocolate or vanilla protein powder
- (if using vanilla protein powder, add an additional 1 Tablespoon of cocoa powder to your shake)
- 1 Tablespoon unsweetened cocoa powder
- ¼ teaspoon caramel extract
- ⅛ teaspoon salt
- 1 packet of Stevia
- 1 cup of ice



## Directions:

- Add all ingredients to a blender and combine. If desired, garnish with a low-fat whipped topping and salted caramel syrup

Recipe developed by The Seasoned Mom ; Recipe and image reproduced from:  
<http://www.theseasonedmom.com/salted-caramel-mocha-protein-shake/>

# Superfood Hot Apple Cider

## Ingredients:

- 4 cups apple juice –if juicing, use approx.
- 4-6 apples
- 5 whole cloves
- 4 cinnamon sticks
- 4 whole cardamom pods
- 2 Chinese star anise
- 1-inch piece of fresh ginger
- ½ teaspoon fresh lemon zest
- ½ orange, thinly sliced



## Directions:

- Juice apples and place the juice in a medium saucepan. Add cloves, cinnamon sticks, cardamom, anise, ginger and lemon zest.
- Cover and heat on a low-medium setting for 20 minutes. Add orange slices during the last 5 minutes.
- Remove from heat and strain the cider to remove spices and fruits.

Recipe developed by Leanne Vogel; Recipe and image reproduced from:  
<http://www.healthfulpursuit.com/2012/12/sugar-free-hot-apple-cider/>



# Dairy and Sugar-Free Pumpkin Spice Latte

## Ingredients:

- ¼ cup pumpkin puree
- 1 tablespoon milk alternative of choice or water
- ½ teaspoon vanilla extract
- ⅛ teaspoon ground ginger
- ⅛ teaspoon nutmeg
- ¼ teaspoon cinnamon
- 8 drops of liquid stevia (or ¼ tablespoon sweetener of choice)
- 1 ½ -2 cups of strongly brewed coffee (or 4 shots of espresso with added water to equal 2 cups)
- ¾ cup of coconut milk or other dairy-free milk of choice
- Cinnamon for top garnish (optional)



## Directions:

- Mix the pumpkin puree, tablespoon of milk alternative/water, spices, and desired sweetener in a small bowl. Whisk together.
- Whisk the coffee and pumpkin mixture together in a small saucepan and heat until the desired temperature is reached.
- In a separate saucepan, heat the ¾ cup of the milk alternative of choice and froth using a handheld frother.
- Divide the coffee mixture into two cups and pour the frothed milk alternative over both. Sprinkle the top with cinnamon, if desired.

Recipe developed by Kimi from the Nourishing Gourmet; Recipe and image reproduced from:  
<http://www.thenourishinggourmet.com/2013/10/paleo-pumpkin-spice-latte-dairy-free-and-sugar-free-as-desired.html>

# Pumpkin Spice Protein Shake

## Ingredients:

- 1 cup unsweetened almond milk
- 2 frozen bananas, sliced
- ½ cup canned pumpkin 2 dates, pitted
- 1 scoop of vanilla protein powder ½ tsp vanilla extract
- 1 pinch of nutmeg
- 1 pinch of cinnamon
- 1 pinch of ground cloves
- 1 pinch of ground ginger

## Directions:

- Blend almond milk, bananas, pumpkin, dates, protein powder, vanilla extract, nutmeg, cinnamon, cloves, and ginger together in a blender until smooth.





# Eating In Season

Jenn Wihlborg

It's that time of year again! Fall is around us and no longer are the days of sweet juicy berries, bright red tomatoes, and crisp yellow corn. When it comes to changes in the year, it is so important to eat with the seasons. Eating produce that is in-season (meaning that the natural harvest of the produce is at its peak) has so many benefits that many people tend to ignore. First and foremost, the produce is at its optimal nutritional value. When grown in the correct season, the plant will have optimal sun exposure, which leads to higher levels of antioxidants (food's natural free-radical defenders). Secondly, eating produce that is in-season guarantees that the produce will have optimal flavor. When picked in-season, produce is fully developed and ripe due to the correct climate during the growing season. When you eat produce that is picked out of season, it is grown in weather that is not favorable, therefore leading to less flavorful and developed produce (yuck!). Lastly, eating in-season fruits and veggies are much more affordable than eating out of season (notice how berries often go on sale during the summer months). This is due to the abundance of produce - when there is enough to go around for all, the prices can be lower than if they were at a high demand with little to supply. With all the great benefits of eating in-season, here are some great fall fruits and vegetables along with some hearty and inviting recipes!



- 1 large delicata squash (about 1 1/4 pound)
- 1 pound brussels sprouts, trimmed of ragged outer leaves and stem
- 3 large shallots, peeled, cut lengthwise in half or thirds
- 2 Tbsp olive oil
- 3 Tbsp pure maple syrup (divided 2 tbsp and 1 tbsp)
- 1 Tbsp apple cider vinegar
- 1 teaspoon Kosher salt (plus more to taste)
- 1/4 cup fresh pomegranate arils



## **Instructions**

**1** Cut the delicata squash in half crosswise, and then in half again lengthwise. Use a metal spoon to scrape out the seeds and strings. Cut the squash into half rounds, about 1/2-inch thick.

**2** Preheat oven to 400°F. Place the squash, brussel sprouts, and shallots into a large bowl and toss with 2 Tbsp olive oil. Sprinkle on 2 Tbsp of maple syrup and one Tbsp of cider vinegar, and toss to coat. Sprinkle with 1 teaspoon of kosher salt.

**3** Spread a little olive oil over the bottom of a large baking sheet. Arrange the squash, brussel sprouts and shallots on the baking sheet in a single layer. Roast at 400°F for 30 to 35 minutes, turning the vegetables over after the first 20 minutes. The squash should be lightly browned and the brussel sprouts well browned.

**4** Remove from oven to a serving dish. Gently toss with fresh pomegranate arils and drizzle with the remaining 1 Tbsp maple syrup.

**Yield:** Serves 4

Read more:

[http://www.simplyrecipes.com/recipes/maple\\_syrup\\_roasted\\_delicata\\_squash\\_and\\_brussels\\_sprouts/#ixzz4HGEoozfr](http://www.simplyrecipes.com/recipes/maple_syrup_roasted_delicata_squash_and_brussels_sprouts/#ixzz4HGEoozfr)



### **For the fall harvest salad**

- **1 small butternut squash, peeled, seeded, and diced into 1.5 cm (1/2-inch) cubes**
- **1½ tablespoon extra-virgin olive oil, divided**
- **salt and freshly ground pepper**
- **1 cup uncooked quinoa**
- **2 cups water**
- **2 cups chopped kale leaves**
- **1/4 cup dried cranberries**
- **1/3 cup chopped pecans**
- **1/3 cup crumbled fat-free feta cheese**
- **2 small Royal Gala apple, diced into 1.5 cm (1/2-inch) cubes**
- **3 tablespoons pumpkin seeds**

### **For the apple cider vinaigrette**

- **2 tablespoons apple cider vinegar**
- **2 tablespoons extra virgin olive oil**
- **2 tablespoons freshly-squeezed orange juice**
- **1 tablespoon Dijon mustard**
- **¼ teaspoon salt**



## Instructions

Pre-heat the oven to 200 degrees C (392 degrees F).

In a large bowl, toss the cubed butternut squash with 1 tablespoon of olive oil, salt and pepper.

Spread it out in a single even layer on a baking sheet covered with parchment paper. Bake for 20-25 minutes, or until the butternut is tender.

Rinse the quinoa and drain. In a small saucepan, combine the quinoa with water and bring to a boil uncovered.

When it starts to boil, reduce the heat to the lowest setting, cover and simmer for 20 minutes or until the water is absorbed and the quinoa is light and fluffy.

Put the chopped kale in a medium bowl with ½ tablespoon of extra virgin olive oil. Use your hands to massage the leaves by lightly scrunching them in your hands. Release and repeat until the leaves soften and the color changes a bit.

**Prepare the apple cider vinaigrette:** mix all the ingredients in a glass jar with a lid and shake well until combined.

In a large mixing bowl, add the quinoa, kale, apples, cranberries, pecan, feta cheese and pumpkin seeds, pour the dressing, toss and serve.

**Yield:** Serves 3

Read More: <http://aseasyasapplepie.com/fall-harvest-salad-with-apple-cider-vinaigrette/>

# Asian Pear

## Ingredients

- 2 large stalks celery, julienned
- 2 Asian pears (also called apple pears), peeled and julienned
- ¼ cup finely chopped fresh cilantro leaves
- 2 green onions (scallions), thinly sliced
- ½ inch piece of fresh ginger, finely grated
- 2 Tbsp. fresh lime juice
- 2 Tbsp. rice vinegar
- ¼ teaspoon finely chopped Thai red pepper (optional)

## Instructions

Whisk together the ginger, lime juice and rice vinegar, and then toss with the remaining ingredients. Let stand for a few minutes before serving.

**Yield:** Serves 2

Read more: <http://www.flavourandsavour.com/asian-pear-slaw-with-ginger-and-lime/>



# MSM and Exercise Recovery

By: Brittany Mock

We all know how it feels to try to squat on the toilet seat after a leg day at the gym. If it was a hard enough workout, we are usually feeling the burn from the oxidative stress and damage to our skeletal tissues. Fortunately, many of us have found what helps alleviate these symptoms such as an improved diet, stretching, increased water intake, walking, etc. Lately, researchers have been observing the effects of a certain compound that may ease the pain and reduce recovery time following a hard workout. This compound, formally called methylsulfonylmethane or more commonly known as MSM, is a naturally occurring compound found in all plants and animals. It is composed of sulfur, oxygen, and methyl groups. MSM is already known to contain many antioxidant and anti-inflammatory properties, like playing a role in the synthesis of glutathione, which is one of the most important intracellular antioxidants. Additionally, this sulfur compound is commonly used to treat arthritis, taken orally or directly on the skin to reduce inflammation.

In a study done with 24 jumping horses, the horses were administered 3 different supplementations. One group was the control group with no supplementation of MSM or Vitamin C. The next group was given MSM, and the third group was administered both MSM and Vitamin C. Blood samples were collected periodically and tested for nitric oxide, carbon monoxide, lipid hydroperoxides and the antioxidant enzymes, glutathione peroxidase, and other factors that would indicate exercise effects. All of the horses showed some negative effects from the jumping in the experiment.

However, it appeared that the horses who took MSM actually had completely recovered from the damages that the jumping caused. It was concluded that MSM actually can offer some protective qualities against oxidative stress during exercise for horses, thus, reducing the recovery times.

A study was also done with 8 healthy men who were moderately exercise trained at <150 minutes/week. They were randomly assigned to ingest either 1.5 grams or 3.0 grams of MSM daily for 30 days. Muscle soreness, fatigue, and blood antioxidant status, and blood homocysteine were measured before and after exercise, pre and post intervention. Exercise performance was also measured. The men all participated in the same amount and type of exercise in the experiment, and the men who took 3.0 grams every day showed a reduction in muscle soreness and fatigue. It was concluded that the MSM was indeed beneficial for both men, however the men who took more MSM had more significant improvements and protection.

So, is MSM the answer to all of our gym lovers out there who just can't take a day off? Well, not exactly. More studies with larger sample sizes need to be done to further confirm these findings of the smaller studies. In the mean time, we can note that MSM occurs naturally in some foods that we eat, such as fruit, corn, tomatoes, tea, coffee, and milk. Keep that in mind next time you are choosing a post-workout meal!

## References:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2586020/>  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3507661/>



# All Things PUMPKIN

By: Marla Morgan

**F**inally, we have OFFICIALLY reached Autumn! I look forward to this time of year for a variety of reasons: The weather starts to cool down, it marks the beginning of the holiday season, my hubby won't think I'm too crazy for buying all of the autumn decorations for our apartment, and it's FINALLY pumpkin season!!! There's more to pumpkin than just your coffee shop pumpkin spice latte and store made pumpkin pie. Unfortunately, most people don't take the time to learn about the incredible health benefits of pumpkin or take advantage of the true nutrition powerhouse that it is. Moreover, pumpkins have quite a vast history extending over several thousand years, making them pretty much the coolest thing.

Pumpkins belong to the large family called cucurbits (also known as the gourd family) which includes cucumbers, melons, squash, and pumpkin.[1] They were originally cultivated in the Americas around 7000 B.C.E. In fact, archaeologists discovered the oldest pumpkin seeds found in Oaxaca Highlands of Mexico![2] Native Americans depended on pumpkins in order to survive long winters. Pumpkins had far more uses than to solely be eaten: They were used to create bowls and containers for storing grains, used for creating mats, used as medicine, used as flour, and Pilgrims even used the shell of the pumpkin as a template for haircuts (where the term "pumpkin head" likely originated).[2,3] Once introduced to European settlers, it became a favorite amongst pilgrims and colonists. It was amongst the many fruits in the first Thanksgiving by the pilgrims. In fact, the pilgrims founded Native American boiling, baking, and drying pumpkins and incorporated pumpkin into biscuits, desserts, and hearty dishes. Additionally, the pilgrims developed a pumpkin beer which was discovered when they couldn't grow a decent crop of barley or hops.[4] The following is a testament showcasing the dependency of pumpkins:[5]

*"For pottage and puddings and custards and pies  
Our pumpkins and parsnips are common supplies,  
We have pumpkins at morning and pumpkins at noon,  
If it were not for pumpkins we should be undone"*

Pilgrim verse, circa 1633

Most people don't realize that pumpkins are a nutrition powerhouse. What makes it better is that all parts of the pumpkin are edible- the flesh, the seeds, and the flowers. [5] The flesh of the pumpkin is rich in beta carotene, a carotenoid which the body converts into vitamin A and is involved in maintaining eye and skin health, amongst other functions.[6] According to University of Illinois Extension, 1 cup of cooked pumpkin contains: [5]



# Pumpkin Nutrition Facts

(1 cup cooked, boiled, drained, without salt)

Calories 49	Zinc 1 mg
Protein 2 grams	Selenium .50 mg
Carbohydrate 12 grams	Vitamin C 12 mg
Dietary Fiber 3 grams	Niacin 1 mg
Calcium 37 mg	Folate 21 mcg
Iron 1.4 mg	Vitamin A 2650 IU
Magnesium 22 mg	Vitamin E 3 mg
Potassium 564 mg	

According to World's Healthiest Foods, a 1/4 cup of dried shelled pumpkin seeds contains 180 calories, 3.45 g of carbohydrates, 15.82 g of total fat, 9.75 g of protein, and 1.94 g of fiber. Of the fat, it contains a good amount of both polyunsaturated and monounsaturated fats. It is often times praised for having a rich micronutrient content, more specifically of manganese (1.47 mg, 75% of RDA), phosphorus (397.64 mg, 57% of RDA), magnesium (190.92 mg, 48% of RDA), copper (0.43 mg, 48% of RDA), zinc (2.52 mg, 23% of RDA), and iron (2.84 mg, 16% of RDA). Additionally, it contains several antioxidant phytonutrients: hydroxybenzoic, caffeic, coumaric, ferulic, sinapic, protocatechuic, vanillic, and syringic acid, pinoretinol, medioresinol, and lariciresinol as well as phytosterols: beta-sitosterol, sitostanol, and avenasterol.[7,8]

Hundreds of varieties of pumpkins exist all of which can be broken down into 3 categories. The following are just a sample of the varieties that exist:

- ▶ **Small pumpkins:** Range from 2-5 lbs
  - Baby bear, baby pam, small sugar or New England Pie, spooktacular, sugar treat, winter luxury. [3]
- ▶ **Standard Orange (intermediate):** Range from 8-15 pounds
  - Autumn gold, bushkin, frosty, funny face, harvest moon, jack-o-lantern, spirit, young's beauty. [3]
- ▶ **Standard orange (large):** Range from 15-25 pounds
  - Aspend, big autumn, big Tome, Connecticut field, ghost rider, happy jack, howden field, jackpot, jumpin' jack, pantkow's field. [3]

I would like to point out one of the most unique pumpkins in existence: the Rouge Vif d'Estampes. This pumpkin is deep red-orange in color, is flattened, and heavily sutured. You remember Cinderella's carriage? Well this pumpkin was the prototype for her carriage and is often times referred to as "Cinderella" pumpkin. [3]



If you plan on purchasing a pumpkin for the purpose of baking it into a pie, the sweetest varieties are the Cinderella, pink banana, sugar pie, and blue hubbard. For use in soups and stews, the red kuri, kabocha, and butternut varieties offer the best taste and texture. As a stand-alone dish, the delicate and carnival varieties are the best to use. For more information, please visit <http://www.allaboutpumpkins.com/perfect.html>. They are a family owned farm called Jack Creek Farms based out of California. [5]

As you can see, pumpkins have many more functions than to flavor our lattes and store bought cookies. There are numerous ways to enjoy using pumpkins and as mentioned early, they truly are a nutrition powerhouse. I hope you decide to try out some of these recipes this fall as they will surely keep you in the holiday spirit. Happy Pumpkin Season!

Check out this awesome cake my aunt made me for my birthday 2 years ago! She baked it using her own pumpkin puree from a real pumpkin (not canned).





## PUMPKIN SEEDS: 7 WAYS

When carving your jack o' lantern this week, think twice before you throw out those pumpkin seeds! These tiny, nutritional powerhouses have been shown to lower your LDL, or bad cholesterol, and help prevent muscle weakness. Instead, try roasting them with any of these festive flavor combinations.

### NOT-SO-SCARY DIRECTIONS

Simply clean and dry your seeds  
Add seasonings & drizzle with 1 Tbsp olive oil  
Bake at 250°F for 1 ½ hours

1

#### PUMPKIN PIE

- ½ tsp. cinnamon
- ¼ tsp. nutmeg
- ¼ tsp. cloves
- ¼ tsp. ginger
- 1 tsp. brown sugar

2

#### HOT TAMALE

- 1 Tbsp. chili powder
- ¼ tsp. cayenne (optional)
- 1 tsp. lime zest and salt & pepper to taste

3

#### THE ITALIANO

- ½ tsp. garlic powder
- 1 Tbsp. dried Parmesan cheese
- 1 tsp. oregano and salt & pepper to taste

4

#### SWEET & SPICY

- 1 Tbsp. Cajun seasoning
- 1 Tbsp. Worcestershire sauce
- 1 teaspoon brown sugar

5

#### HOT COCOA

- Add 1 Tbsp. cocoa powder
- ½ tsp. cinnamon
- 1 Tbsp. raw (turbinado) sugar

6

#### ORIENT EXPRESS

- Add 1 tsp. orange zest
- 1 Tbsp. soy sauce
- ¼ tsp. ginger
- 1 tsp. honey

7

#### INDIAN SUMMER

- Add 1 tsp. turmeric
- ½ tsp. cinnamon
- ¼ tsp. ginger
- 1 tsp. honey and salt & pepper to taste

7

#### NUTRITION FACTS

Serving: 1 ounce, 125 calories\*, 11.5 g fat

\* Calories will be higher for flavor options that include sugar or honey. While a great source of energy, pumpkin seeds are easy to overeat (just like Halloween candy!) so be sure to share, or watch your portion size.

Learn more at: [clevelandclinic.org/HealthHub](http://clevelandclinic.org/HealthHub)

© 2014 Cleveland Clinic



# Pumpkin Soup

Prep: 5 Minutes Level: Easy

Cook: 1 Hours Serves: 8

## Ingredients

- 2 whole Pie Pumpkins
- 1 quart Vegetable Or Chicken Stock
- 1/2 cup Heavy Cream
- 1/3 cup Maple Syrup
- Dash Of Nutmeg
- Salt To Taste
- Extra Cream, For Serving



## Preparation

1. Preheat oven to 300 degrees. Place pumpkins on a cookie sheet and roast them until slightly shriveled and soft. Allow to cool slightly, then slice in half and carefully scoop out seeds and pulp. Scoop yummy flesh into a bowl. Set aside.
2. In a pot, heat up the pumpkin flesh with the stock and maple syrup until simmering. Mash out the big chunks, then transfer the mixture to a blender or food processor (or use an immersion blender) and puree until velvety smooth. Add cream and nutmeg, then blend again.
3. Reheat if you need to, or just go ahead and serve in a hollowed-out pumpkin of whatever size you'd like.

<http://thepioneerwoman.com/cooking/pumpkin-soup/>

# Pumpkin Smoothie Bowl

Author: The Almond Eater

Prep time: 5 mins Total time: 5 mins Serves: 1

## Ingredients

- 3/4 cup pumpkin puree\*
- 1 banana
- 1/2 cup unsweetened almond milk
- 1/2 tsp cinnamon
- 1/4 tsp nutmeg
- 1/8 tsp all spice
- Toppings: whatever you'd like!  
Recommended: apple, walnuts, chia seeds, cinnamon

## Instructions

1. Combine smoothie bowl ingredients in a blender and pulse until smooth.
2. Transfer to a bowl and add toppings.
3. Enjoy!

## Notes

- Make sure to use pure pumpkin, not any pumpkin pie mix.

<http://thealmondeater.com/2015/09/pumpkin-smoothie-bowl/>



# Pumpkin Pie Oatmeal

Yield: 4 servings

Prep time: 5 min.

Cook time: 5 min.

Total time: 10 min.

## Ingredients

- 1 cup old-fashioned rolled oats
- 1 3/4 cups almond milk
- 1/4 cup pumpkin puree
- 1/2 teaspoon vanilla extract
- 1/2 teaspoon ground cinnamon
- 1/4 teaspoon ground nutmeg
- 1/2 cup chopped pecans
- 1/4 cup maple syrup

## Directions

1. Combine oats and milk in a small saucepan over medium heat.
2. Bring to a boil; reduce heat and simmer, stirring occasionally, until desired consistency is reached, about 3-5 minutes. Stir in pumpkin, vanilla, cinnamon and nutmeg until heated through, about 1 minute.
3. Serve immediately, garnished with pecans and maple syrup, if desired.



<http://damndelicious.net/2015/10/29/pumpkin-pie-oatmeal/>

## References:

1. Cucurbits. *Extension*. Available at: <http://extension.psu.edu/plants/vegetable-fruit/production-guides/vegetable-gardening-1/Cucurbits.pdf>. Accessed September 24, 2016.
2. The history kitchen. *Pbs*. Available at: <http://www.pbs.org/food/the-history-kitchen/history-pumpkins-recipes/>. Accessed September 24, 2016.
3. Pumpkins and more. *University of Illinois extension*. Available at: <https://extension.illinois.edu/pumpkins/varieties.cfm>. Accessed September 24, 2016.
4. Westbrook, D. More than pies: eight pumpkin recipes for fall. *East West*. Nov.-Dec. 1991: 25+. *Culinary Arts Collection*. Accessed September 24, 2016.
5. All about pumpkins. *All about pumpkins*. Available at: <http://www.allaboutpumpkins.com/history.html>. Accessed September 24, 2016.
6. Beta-carotene. *Mayoclinic*. Available at: <http://www.mayoclinic.org/drugs-supplements/beta-carotene/background/hrb-20058836>. Accessed September 25, 2016.
7. Pumpkin seeds. *The world's healthiest foods*. Available at: <http://www.whfoods.com/genpage.php?tname=foodspice&dbid=82>. Accessed September 24, 2016.
8. Magee, E. Pumpkin seed power: also known as pepitas, magnesium-rich pumpkin seeds are especially delicious in autumn when you can roast them fresh. *Better Nutrition* Oct. 2006: 58+. *Culinary Arts Collection*. Accessed September 24, 2016.





# LEAKY GUT SYNDROME

By: Sarah Boroski

While browsing the magazine aisle, picking up misplaced magazines in the long line at Walmart, or flipping on Dr. Oz, one of the most highlighted, ever so fascinating, slightly gross new trend, Leaky Gut Syndrome. Leaky Gut Syndrome, ignorantly sounds easy to define, but not quite. The word 'syndrome' itself means that there is not a definite reason why someone experiences the signs or symptoms they are having. Multiple factors play into it. Now, what is Leaky Gut Syndrome? Think of your intestinal tract as a patio screened tube, similar to the one surrounding a porch keeping out mosquitos. In the gut, everyone has "good guys", "bad guys", and "bystanders", each playing a vital role in absorption. In a healthy individual, all the nutrients that need to be absorbed are and all that need to be discarded are swiftly discarded. But what happens when the screen of your GI tract gets worn out from toxins like bad diets, medications, and even stress? The toxins ("bad guys") begin to overtake the "good guys", causing our immune system to weaken, eventually changing or "rebuilding" our "patio screen." Now the GI tract resembles the old worn out patio screens that are on a 50-year-old house. Since there are holes in the intestinal wall, every time food or a drink is consumed, it does not go through the GI tract properly. It gets leaked out (hence the name) into the blood stream. The blood system has undigested food particles, toxins, and microbes, directly passing into it and weakening the immune system. In short, the body's immune response starts to go into a panic, attacking everything that it encounters.



Everyone in the world experiences Leaky Gut Syndrome on some level, but what is making it so prevalent in today's society? There are a couple factors that are increasing this syndrome, one of which is processed foods being in surplus. Gluten is a protein found in wheat, rye, and barley that aids in keeping the shape of foods. The two proteins that combine to make gluten cause an inflammatory response that releases another protein that loosens the "patio screen" by forcing the holes to stay open, for however long gluten is present. Along with that, there is an overload of stress in the 21st century. Everyone is trying to outshine one another in everything they are involved in. Stress causes a weakening in the immune system which increases the amount of "bad guys" in the body. The more "bad guys" in your system, the more medicated people are with synthetic medications to try to counter balance what their body is lacking. NSAIDs and other pain relieving medications being given by doctors are more prevalent than ever before. The medications imitate the mucus barrier that lines the intestinal wall, making the body's naturally weaker.

Bloating, gas, depression, cravings for sweets and breads, joint pain, autoimmune disease(s), etc. are some signs and symptoms that occur. Leaky Gut is not just a "one fits all," kind of syndrome. There are different types because the external and/or internal causes are different. Someone can even have a combination of them. There are five different types:

Candida Gut- which is yeast overgrowth that develops from the use of: birth control pills, high sugared diet, and foods such as bananas, cow's milk, and wheat.

Stress Gut- emotional stress, excessive sugars, and carbohydrates enhance this type.

Immune Gut- prescription antibiotics, medications, a high amount of inflammatory foods, depression and grievance. All of which weaken the immune response, inflammatory bowel diseases, and food sensitivities.

Gastric Gut- poor digestion, lack of absorption, antacids. This type builds up bacteria over growth, bloating or gas.

Toxic Gut- when a consumption of high amounts of bad fats and toxins start to over work the liver gallbladder.<sup>1</sup>

How are these treated and what can someone do to make their gut work properly again? The simple solution is to change the diet. Sounds simple, but each type has a different "prescription" to heal itself. Some preventative measures that can be taken for each are listed in Table 1.

With each type of Leaky Gut there are certain foods that need to be consumed and eliminated from a daily diet and certain steps that need to take place. The first being that in each type there should be an elimination of trigger foods, consumption of therapeutic foods, supplemental treatment, and a lifestyle change.<sup>2</sup> Each type has different steps that need to be taken in each because they are caused by different factors. A few foods that should be consumed and not consumed in each diet are listed in Table 2.

When cooking meals, the vegetables should be cooked fully and very soft. This is because it is easier for the body to digest and absorb the nutrients.<sup>3</sup>

Leaky Gut Syndrome, affects not only your body, but every aspect of you. The body is under a lot of stress and if the person experiencing these symptoms is naturally stressed, it makes the symptoms become elevated even more.<sup>4</sup> This affects your



psyche and everything stemming from that. Having a good doctor and support system makes this syndrome bearable. If someone experiences any of the signs and symptoms of Leaky Gut, there are actual lab tests that can be done to clarify it: Lactose Breath Test, Organic Acid Test, IgG (immunoglobulin G) Test, and the common stool test.<sup>4</sup> While waiting for the lab results, do not hesitate to be proactive and start to take control of your diet.

Leaky Gut Type	Causes	Diet	Avoid
Candida	High-sugar diet, antibiotics, chronic anxiety.	Low sugar intake, high probiotics.	Avoid white/ brown sugar, coffee, alcohol, and grains.
Stress Gut	Emotional stress, thyroid issues, adrenal fatigue, high	Diet high in nutrient-dense foods low in sugar.	Learn to de-stress and let go.
Immune Gut	Food sensitivities, gluten, dairy products.	Beef bone broth, gluten free diet.	Listen to your body 42-72 hours later and understand
Gastric Gut	Under-chewing, overeating, slow digestive system.	Lots of fruits and vegetables, smaller meals.	Getting out of daily routine, eating fermented vegetables.
Toxic Gut	Over-consumption of bad fats, toxicity environment,	Organic meats and vegetables.	Sour foods and in raw form.

**Table 1 (above) & Table 2 (below)**

	Candida	Stress	Immune	Gastric	Toxic
Acceptable foods:	yogurt lamb lean beef collagen fiber asparagus carrots broccoli pumpkin cranberries lime lemon	lean beef turkey wild- caught fish kale mushrooms sauerkraut spinach blackberries figs strawberries avocado almonds brazil nuts walnuts	chicken egg yolks yogurt bone broth acorn squash cauliflower blueberries celery garlic kale broccoli flaxseed oil chia seeds flaxseeds coconut flour	chicken lean beef protein powder turkey kefir arugula pickles cabbage rutabaga sweet potatoes apple mango peas mung beans pumpkin seeds	lean beef turkey yogurt kefir beets bell peppers romaine lettuce lemons grapefruit plums raspberries oats lima beans avocados
Avoidable foods:	dairy yeast products raw foods refine sugar	alcohol caffeinated drinks (coffee) refined grains	legumes dairy refined foods raw foods	caffeine peppers alcohol fried food	nut butters oils conventional dairy alcohol

#### References

1. H. (2016). What's your gut type (and how is it affecting your health)? Retrieved September 15, 2016.
2. Axe, J. (n.d.). Eat dirt: Why leaky gut may be the root cause of your health problems and surprising steps to cure it.
3. University, F. M. (2013). Leaky Gut: Can This Be Destroying Your Health? Retrieved September 14, 2016
4. H. (2015). Should You Get Tested for Leaky Gut? Retrieved September 15, 2016



# Glucose Levels within pregnant women with Type 1 diabetes

Michael Callahan

Diet and nutrition require extra special attention during pregnancy. The foods eaten at this time are the baby's main source of nutrients. According to the Academy of Nutrition & Dietetics, pregnant women should seek to consume a balanced diet, mostly made up of whole grains, fruits, vegetables, lean protein, low fat dairy, and healthful fats (ie: olive oil)<sup>1</sup>. This diet follows the general recommendations for eating a healthy, balanced diet, and aims to ensure key nutrients are being consumed. Getting proper nutrients is the primary goal during pregnancy. Another goal of consuming a diet rich in whole foods and avoiding high sugar/refined foods helps pregnant women to avoid unhealthy weight gain. A diet lacking in protein, iron, calcium, folic acid and other vitamins and minerals can be detrimental to the baby, as well as the mother. Paying close attention to diet, nutrition and overall health is important in all pregnant women to assure proper health of the mother and baby. Health components such as blood glucose levels are much more prone to fluctuation as the baby and mother are competing for nutrients. Babies born from women with diabetes or poor blood glucose control are at risk for birth defects. It is vital for women with diabetes prior to pregnancy

to get blood glucose levels under control before and during pregnancy.

High blood glucose levels pass through the placenta to the baby, and can contribute to birth defects<sup>2</sup>. Ideally, it is important to get blood glucose levels under control before pregnancy even occurs. High blood glucose levels during the first trimester, can be detrimental to the baby, leading to risk of miscarriage and birth defects. This time period occurs seven weeks after the mother's last period, at which point complete formation of the baby's organs has occurred.

*"High blood glucose levels pass through the placenta to the baby, and can contribute to birth defects".<sup>[2]</sup>*

Diabetes is characterized by high blood sugar levels, also called hyperglycemia. Blood sugar or glucose, is synthesized in the muscle and liver, or obtained from the food we eat. It is our body's main source of energy. Glucose travels

through the blood to provide energy to all of our cells. Blood glucose levels are controlled by insulin, which is a hormone excreted by the pancreas in response to high blood glucose levels. Insulin's role is to assist the blood in glucose transport to body cells, resulting in lower blood glucose levels.

Type 1 diabetes typically develops in younger people, and is also known as juvenile diabetes for this reason. Type 1 diabetes is characterized by insufficient



insulin production. This is caused by the body's immune system attacking and destroying the cells responsible for making insulin. Patients with type 1 diabetes require special attention. Insulin shots and oral medications are usually necessary to promote insulin levels. Diet, exercise, and monitoring and controlling blood pressure and cholesterol levels are also very important.

*"Luckily, because gestational diabetes affects the mother during late pregnancy, the baby does not experience birth defects like those of mother's who had diabetes prior to pregnancy."*

Type 2 diabetes, previously called adult-onset diabetes, affects people of all ages and is characterized by insulin resistance. This often happens in people who are overweight and/or inactive, and is typically a result of excess sugar intake. This causes the pancreas to pump out excess insulin in times of excess glucose levels. Over time, the added demand results in insufficient production of insulin by the pancreas when blood sugar levels do rise, causing hyperglycemia.

Women with type 1 and type 2 diabetes, should pay close attention to blood glucose levels three to six months prior to pregnancy if possible. It is not only essential to the health of the baby, but also for the mother to monitor blood glucose levels. Some possible risks for hyperglycemia or hypoglycemia in diabetic patients during pregnancy

include urinary bladder or vaginal infection, worsening of diabetes symptoms related to kidneys and the eyes, and preeclampsia, which is high blood pressure (and sometimes protein in the urine). According to the American Diabetes Association, it is recommended to keep blood glucose levels between 60-199 mg/dl pre-meal, and 100-149 mg/dl post-meal during the first trimester<sup>2</sup>.

Another form of diabetes, known as gestational diabetes, occurs when women experience high blood glucose levels during pregnancy, who had not previously had blood glucose concerns. This is another reason to control blood glucose levels throughout the pregnancy process. Research is still being done to understand the cause of gestational diabetes, which as of 2014 has a prevalence of 9.2%, according to Centers for Disease Control and Prevention. Evidence supports the occurrence of gestational diabetes is most likely due to the hormones that support the placenta and growth of the baby. These hormones are also blocking the action of the mother's insulin, thus causing insulin resistance. Due to the inability of the mother to produce enough insulin, blood glucose is taken from the blood and blood sugar levels rise. This process called hyperglycemia is what leads to gestational diabetes. Luckily, because gestational diabetes affects the mother during late pregnancy, the baby does not experience birth defects like those of mother's who had diabetes prior to pregnancy. Excess blood glucose still crosses the placenta however, causing the baby's pancreas to produce more insulin to compensate for high blood glucose levels. The insulin is stored as excess fat, and babies born with excess insulin will ultimately be born with low blood sugar levels as a result. This leads to breathing problems and puts these



babies at higher risk for obesity and type 2 diabetes later in life.

As mentioned earlier, the baby's organs are forming during the first trimester. Therefore, it is vital for the mother to monitor blood glucose levels as soon as possible, ideally during pre-pregnancy.

Women with type 1 and type 2 diabetes are at higher risk for health problems during and after pregnancy as well.

Patients with type 1 diabetes need to prepare for the body's elevated need for insulin, especially in the second and third trimester. The placenta creates hormones to facilitate the baby's growth, but also blocks the mother's insulin production. As a result, insulin needs increase, and should be discussed with a doctor prior to pregnancy. Monitoring blood glucose levels poses a particular problem for women with type 1 diabetes. These patients can experience substantial insulin level fluctuations on a day to day basis, making it difficult to maintain blood glucose levels within normal conditions. Even as patients are being closely monitored for blood glucose levels, are receiving intensive insulin therapy and controlled glycated hemoglobin levels (below 7%), over half the patients still have blood glucose levels above normal range. They typically also experience hypoglycemia, or low blood sugar, for up to 3.5 hours a day. Therefore, it is imperative to control not only hyperglycemia, at the expense of the baby's health, but also hypoglycemia, at the expense of the mother's health.

*"Patients with type 1 diabetes need to prepare for the body's elevated need for insulin, especially in the second and third trimester."*

Glucose monitoring, insulin pumps, and sensor-augmented pump therapy are current tested methods used to safely get women with type 1 diabetes through their pregnancy. Due to advances in technology, a computer algorithm such as a closed-loop system, is being tested on mothers with type 1 diabetes to test its effectiveness. The closed-loop system contains a set of

mathematical instructions that works synonymously with glucose levels of real-time glucose monitors. The algorithm works to adjust insulin-pump delivery based off of the glucose measurements received. In a particular study published by the New England Journal of Medicine, a closed-loop system was tested on patients with type 1 diabetes for at least 12 months<sup>6</sup>. Stipulations regarding the patients included being between the age of 18 to 45, within a gestation period of 8 to 24 weeks, and a glycated hemoglobin level between 6.5 and 10%. These patients were already used to multiple daily injections, or an insulin pump. The closed-loop system relied on a constant reading of blood glucose levels from the patients and administered insulin via a pump every 12 minutes. Weight and total daily insulin dose administered were recorded daily. Through various randomized 4-week study trials, the effectiveness of the closed-loop system was assessed based off of time blood glucose concentrations were between 63 to 140 mg per deciliter (mg/dl) over night. Other considerations included



recording and analyzing mean glucose levels, glucose variability, time spent in high or low blood glucose levels, insulin dose, and glycated hemoglobin levels. The results of the experiment showed a 15% increase in the percentage time that glucose was in the target range for over a 24 hour time period. Lower mean glucose levels were also achieved within this experiment. Most importantly, these results did not result in hypoglycemic levels in the patients, as insulin was distributed more evenly by use of the closed-loop system. Thus, a closed-loop system could be potentially beneficial to pregnant women with type 1 diabetes.

Monitoring nutrition and overall health throughout the pregnancy will be most beneficial for the mother and baby. Regardless of health status, the baby and mother are dependent on vital nutrients to fuel and energize this process. The health and safety of the mother and baby can be particularly challenging in type 1 diabetes patients. New technology, along with research and testing can give us a better understanding of ways to get mothers safely through pregnancy. The closed-loop system, for instance, yielded positive results. Diabetes research has helped us to understand it more than

ever. A safe and healthy pregnancy is attainable, but it does take planning. The American Diabetes Association encourages type 1 diabetics to assemble a team of prenatal specialists to safely monitor the health of the mother<sup>1</sup>. Some of the specialists include: a dietitian, diabetes educator, as well as a doctor, obstetrician, and pediatrician with background knowledge in diabetes. All are available to provide knowledge, counseling and monitor health and wellness throughout the pregnancy.

#### References:

1. American Diabetes Association. (05, Nov. 2013). Before Pregnancy. American Diabetes Association. <<http://www.diabetes.org/living-withdiabetes/complications/pregnancy/before-pregnancy.html>>.
2. Healthline Editorial Team. (30, Mar. 2016). Nutritional needs during pregnancy. *University of Illinois-Chicago, College of Medicine*. <<http://www.healthline.com/health/pregnancy/nutrition>>.
3. Kohn, J. (07, Dec. 2015). Top tips for eating right during pregnancy. *Academy of Nutrition & Dietetics*. <<http://www.eatright.org/resource/health/pregnancy/what-to-eat-when-expecting/eating-right-during-pregnancy>>.
4. Nichols, H. (2015). Diabetes, the difference between type 1 and type 2 diabetes. *Medical News Today*. <<http://www.medicalnewstoday.com/articles/7504.php>>.
5. Stewart, Z. A., Wilinska, M. E. W., Hartnell, S., Temple, R. C., Rayman, G. Stanley, K. P.,...Murphy, H.R. (28, Aug. 2016). Closed-Loop Insulin Delivery during Pregnancy in Women with Type 1 Diabetes. *New England Journal of Medicine*: 375:644-654. <<http://www.nejm.org/doi/full/10.1056/NEJMoa1602494#t=article>>.



# Effects of Alcohol Consumption after Bariatric Surgery

Author: Shannon McCarthy

The prevalence of obesity has dramatically increased and with that so has the prevalence of bariatric surgeries. There are different forms of bariatric surgery but the main goal is to restrict the amount of food going into the stomach and/or slow the rate that food comes out of the stomach. In recovery from this surgery, patients are encouraged to maintain a healthy diet and regularly exercise in order to keep the weight off. Bariatric patients are also told to avoid smoking and taking certain medications that lead to stomach disruption, since now the stomach is smaller and at a higher risk for medical issues. Also related to this is the consumption of alcohol since it is directly related to the stomach and digestion of liquids.

Studies have been conducted to assess post-surgery tests on the effects of alcohol absorption, mechanisms, elimination and health concerns. Most studies show negative effects of alcohol consumption after bariatric surgery, in fact, one of the leading causes of deaths of bariatric patients is alcohol cirrhosis.<sup>1</sup> This disease is liver disease directly related to alcohol consumption, also called the alcoholic liver disease. It was found that patients had higher peak alcohol levels, absorbed alcohol faster and took longer to excrete it.<sup>1</sup> Therefore, there are very harmful side effects related to alcohol

consumption and it is a very bad idea for a bariatric patient to consume alcohol post surgery.

Quitting drinking is easier said than done for many bariatric patients. There may be a relation to addictive behaviors and tendencies such as substance use and overeating.<sup>1</sup> This means that not only are these patients coping from the pain, complications, and lifestyle changes of post surgery, but if they drank alcohol before surgery they are also suffering from alcohol withdrawals. Since there is this correlation between addictive behaviors, there is a fairly large population of bariatric patients that have trouble with alcohol abuse as well. There are psychological and physiological properties relating to these addictive behaviors so they should be taken seriously and treated with care.<sup>2</sup>

## Citations

1. Li L, Wu L. Review article: Substance use after bariatric surgery: A review. *Journal Of Psychiatric Research* [serial online]. May 1, 2016;76:16-29. Available from: ScienceDirect, Ipswich, MA. Accessed September 19, 2016.
2. Effects of Alcohol After Bariatric Surgery (RBA). Washington School of Medicine. April 22, 2013. Accessed September 10, 2016.



# OH . . . SUGAR

By: Candace Gilbert

Sugar. Pure deliciousness. There are few things that aren't made better by sugar. Even Mary Poppins knew "A spoonful of sugar helps the medicine go down..." Coke tells you to "Open Happiness", as if someone figured out how to bottle a feeling and they were capitalizing on it. Evidence has been mounting for decades about the dangers of high sugar intake. Knowing that it carries with it the increased risk for hypertension, cardiovascular disease, obesity and obesity-related cancers, as well as cavities, may leave a bitter taste in your mouth<sup>1</sup>.

It's no secret that excessive sugar intake sugar is bad for you, but what constitutes excessive? One cross-sectional study of children showed a 5% increase in insulin resistance with every 8 ounces over the first 11.8 ounces. The same study showed children that consumed no sugar sweetened beverages (SSBs) had a smaller waist circumference and higher HDL cholesterol and lower triglycerides than those of other children<sup>1</sup>. All of which point to a direct correlation between increased SSB consumption and an increased risk of cardiovascular disease and hypertension. Obesity is just the tip of the iceberg and the most apparent physical indicator.

With the American Heart Association now making recommendations that children consume less than 25 grams a day of the white stuff, it is becoming more apparent that sugar is one of the leading causes of preventable disease and illness related to lifestyle. But this isn't just about children, for years the AHA has resolved that adults should limit their consumption to 25 grams, for most women and 32 grams for men<sup>2</sup>. Twenty-five grams is equal to about 100 calories or 6 teaspoons. That is little "t", not big "T". To put it in perspective, a 20-ounce bottle of Coke, the kind found in every vending machine east of the Pacific Ocean has 65 grams of sugar or 16 teaspoons or 2 ½ times the daily limit for women and children. Perhaps you "Do the Dew", 77 grams of sugar. Need to party like a Monster Rockstar? 62 Grams in a 16 oz. can. Like to keep things simple with Vitamin Water? 33 grams or 8 teaspoons of added sugar. Keep things real with fruit juice? You are better off drinking the Kool-Aid. Apple Juice has 52 grams of sugar while the same 16 oz serving of Cherry Kool-Aid has only 32.


These are just a few examples from the SSB category and sugar isn't really hiding in here unless it's behind more sugar. It's full on, in your face, and your dopamine receptors love you for it. And it is the largest single, measurable food category that has absolutely zero nutritional value, completely devoid of benefits.

If we are keeping our sugars below 25 grams a day, then we need to know where else it lurks.  
Everywhere.

According to SugarScience.org there are 61 names for sugar and it can be found in 74% of packaged food<sup>3</sup>. In your Ketchup, Salsa, spaghetti sauce, salad dressing... even in your bread. Mostly the names are pretty straight forward, if it ends in sugar or syrup it's sugar, if it ends in -ose it's sugar. Nectar, bees like it and it is sugar. Honey, all natural sugar. Cane juice is from sugar cane. But then there are some strange names that will take either a chemistry degree or a deep, deep love of sugar to recognize. Maltol, Muscovado, Panocha, Mannos, Dextrin, Treacle<sup>3</sup>? Who comes up with this? And how are you supposed to know? Is there an App for that?

The easiest way to know how much sugar something has in it is by the nutrition label which will list how many grams an item contains. There is a shortfall in this as labels currently don't have to say how much is added as opposed to naturally occurring. That's when you look at the ingredient list for those strange words. My "healthy" bread (it's in the name) has 3 grams of sugar so it must be naturally occurring, right? Wrong, sugar is the third ingredient. Flour, water, sugar. There is more sugar in my bread than flaxseed and I can see the flaxseed.





Yogurt is a healthy snack, high in calcium and, depending on the type, high in protein. But it can also come high in sugar. If you compare a label of plain yogurt to one with flavor, you can deduce how much of the sugar is added and how much is naturally occurring. You may be surprised by the amount of sweetener is added to your healthy snack. A simple remedy is buying plain yogurt and adding your own fruit or even a teaspoon of honey or maple syrup. An article by Jessica Cording, MS, RD, CDN from the Academy of Nutrition suggest mixing plain yogurt with regular sweetened yogurt to cut the sugar intake. Cording also suggest that instead of "obsessing over grams and teaspoons, focus on reducing added sugar intake by limiting products that contain it"<sup>4</sup>.

Sounds simple enough but a lot of foresight has to go into avoiding sugar laden foods. The easiest thing is to cut out SSBs and replace them with milk or water. Look for grains, bread and cereal, pasta and rice, with less than 1 gram of sugar. Try making your own pasta sauce, salsa, salad dressings, etc. Those are all quite easy to make and taste great without sugar. For those more ambitious and in position to do so, baking your own treats allows you the freedom to control the amount of sugar you put in a recipe. It rarely effects the baking process and still taste as good if not better than store bought<sup>4</sup>.

Food manufactures will soon be listing added sugars on the nutrition label which should make things much simpler. Until then we need to be vigilant if we want to live a long and healthy life. Lifestyle modification doesn't mean obliterating a food group (sugar is not a food group), it means practicing moderation. And while the media has sold us on moderation being whatever we want without consequence, the science begs to differ.

#### References

1. Vos MB, Kaar JL, Welsh JA, et al. Added Sugars and Cardiovascular Disease Risk in Children: A Scientific Statement From the American Heart Association. *Circulation*. August 2016.  
<https://login.dax.lib.umf.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cmedm&an=27550974&site=eds-live&scope=site>. Accessed September 20, 2016. Journal Article
2. By Any Other Name It's Still Sweetener. Added Sugars Add to Your Risk of Dying from Heart Disease. Added Sugars Add to Your Risk of Dying from Heart Disease. [http://www.heart.org/heartorg/healthyliving/healthyeating/nutrition/added-sugars-add-to-your-risk-of-dying-from-heart-disease\\_ucm\\_460319\\_article.jsp#.v-c3xjtus9y](http://www.heart.org/heartorg/healthyliving/healthyeating/nutrition/added-sugars-add-to-your-risk-of-dying-from-heart-disease_ucm_460319_article.jsp#.v-c3xjtus9y). Accessed September 24, 2016.
3. @sugarscience. Hidden in Plain Sight. SugarScience.org. <http://www.sugarscience.org/hidden-in-plain-sight/#.v-aopptus9y>. Published December 9, 2014. Accessed September 22, 2016.
4. Cording J. Looking to Reduce Your Family's Intake of Added Sugars? Here's How. Kids Eat Right. <http://www.eatright.org/resource/food/nutrition/dietary-guidelines-and-myplate/looking-to-reduce-your-familys-added-sugar-intake-heres-how>. Published January 7, 2016.





# Paris and (May 15-22, 2017) Amsterdam

The goal of this program is review of social, historical and cultural aspects of Dutch and French societies with focus on factors influencing their diets. Students will have this opportunity to become familiar with Dutch and French food system with emphasis on social and cultural aspects that have an impact on nutrition and dietetic practice. Moreover, students will visit researchers and students in the departments of nutrition and dietetics in Netherlands and France. It will be a unique opportunity for students to exchange their knowledge and experienced based on their social and cultural values. In addition to visiting universities, a cheese factory and a dairy farm, a tour to historical and cultural sites will be provided: Visiting Louvre museum, Eifel tower, Amsterdam canals, traditional wind meals, Notre-Dame and Anne Frank house are included. Both Amsterdam and Paris are in the list of the most diverse cities in the world. Visiting Amsterdam and Paris will provide an exceptional opportunity to explore various cultures and ethnicities in one place. It will help students to formulate new ideas for their own research and practice.

**SAILS Scholarships Available (up to \$1500)**

## **COST:**

The cost of the program is approximately \$3000.00 and it includes: Airfare, lodging, most meals, excursions, and local transportation. It does not include: tuition, some meals or spending money.

**Leader:** Dr. Alireza Jahan-mihan

alireza.jahan-mihan@unf.edu; 39/3057A, Department of Nutrition & Dietetics







CONTACT US

# NUTRI *NEWS*

---

**Sara Boyd**

Editor in Chief

[sara.boyd@unf.edu](mailto:sara.boyd@unf.edu)



**Dawn Dragone**

Publisher

[dawn.dragone@unf.edu](mailto:dawn.dragone@unf.edu)

**Shannon Wilkinson**

Publisher

[shannon.wilkinson@unf.edu](mailto:shannon.wilkinson@unf.edu)



**Katie Kuykendall**

Editor

[N00934289@ospreys.unf.edu](mailto:N00934289@ospreys.unf.edu)

**Dr. Alireza Jahan-mihan**

Faculty Advisor

[UNFNutriNews@yahoo.com](mailto:UNFNutriNews@yahoo.com)